

APPENDIX B DETAILED CUMULATIVE VISIBILITY AND PSD CLASS I INCREMENT ANALYSES

Cumulative Class I Increment Impacts

Since the predicted Class I increment impacts from the Project were above the Prevention of Significant Deterioration (PSD) Class I significance levels (proposed by EPA but never formally adopted), a cumulative Class I -increment analysis was conducted. There are three mandatory Class I areas within 200 kilometers (km) of the Project: Yellowstone National Park (YNP), UL Bend Wilderness (UL Bend), and North Absaroka Wilderness (NAW). The Northern Cheyenne Reservation (NCR) is a nonmandatory Class I area. Because these Class I areas are all located more than 50 kilometers from the site, CALPUFF modeling was used to assess the cumulative impacts on the Class I areas. The CALPUFF modeling protocol is detailed in the air quality permit application (Bull Mountain Development Company, LLC., 2002b).

Off-site Emitting Sources for Class I Analysis

The off-site emitting sources included in the Class I cumulative increment analysis are presented in Table B-1.

Table B-1 Emissions for Off-site Emitting Sources in Class I Cumulative Increment Analysis

Source	SO ₂ Emissions (lbs/hr)	NO _x Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)
Graymont Western Lime, Townsend, MT			
Kiln #1	63.5	89.8	20.8
Kiln #2	63.5	100	20.8
Rocky Mountain Generation, Hardin, MT			
Main Stack	195.6	117.4	19.56
Yellowstone Energy Limited Partnership, Billings, MT			
Main Stack	0	319	1.21
Colstrip Energy Limited Partnership, Colstrip, MT			
Main Stack	16.32	328	6.4
PPL Units #3 and #4, Colstrip, MT			
Unit #3, 3-hour	2136.5	5301	379
Unit #4, 3-hour	2136.5	5301	379
Unit #3, 24-hr	1363	5301	379
Unit #4, 24-hr	1363	5301	379
Sources in Park and Big Horn Counties, WY			
Williston Basin, EB	0	38.1	0
Colorado Inter. EB	0	34.2	0
Dakota Coal, Frannie	0.75	28.8	0

Source: Bull Mountain Development Company No 1 LLC., 2002f

PSD Class I Increment Impacts

A cumulative Class I increment analysis was performed since Class I increment impacts from Project, by itself, were greater than PSD Class I significance levels (the proposed, but not adopted PSD significance levels are 4% of the Class I increments). The CALPUFF modeling results in Table B-2 show the impacts for the cumulative PSD Class I increment analysis. This analysis includes impacts from all PSD-increment consuming sources in the area, including PPL Colstrip Units #3 and #4.

Table B-2: Cumulative Analysis PSD Class I Increments

Pollutant	Average Period	YNP Impacts ($\mu\text{g}/\text{m}^3$)	UL Bend Impacts ($\mu\text{g}/\text{m}^3$)	NAW Impacts ($\mu\text{g}/\text{m}^3$)	NCR Impacts ($\mu\text{g}/\text{m}^3$)	PSD Class I Increment ($\mu\text{g}/\text{m}^3$)	PSD Class I Sig. Level ($\mu\text{g}/\text{m}^3$)
NO ₂	Annual	0.0005	0.009	0.0009	1.248	2.5	0.1
SO ₂	Annual	0.013	0.037	0.015	0.50	2	0.08
	24-hour ^a	0.55	0.78	0.58	6.64 ^b	5	0.2
	3-hour ^a	1.80	3.08	1.77	38.18 ^b	25	1.0
PM ₁₀	Annual	0.005	0.012	0.006	0.139	4	0.16
	24-hour ^a	0.17	0.31	0.18	2.25	8	0.32

Source: Memo to Dan Walsh, DEQ from Diane Lorenzen, P.E., 2002b

^aBased on High Second High Impact

^bPrior to undertaking the cumulative impact analysis, MDEQ informed the Proponent that exceedances of the short-term SO₂ Class I increments had been previously modeled at receptors on the NCR.

The cumulative modeled impacts in the above table show that the 24-hr and 3-hr SO₂ Class I increments at YNP, NAW, and UL Bend are above the PSD Class I significance levels but below the Class I increments. Therefore, these predicted impacts would be considered moderate. All of the other modeled impacts at these Class I areas are below the PSD Class I significance levels. Therefore, the predicted impacts would be considered low.

The cumulative modeled impacts, as outlined in Table B-2, predict that the 24-hr and 3-hr SO₂ Class I increments at the NCR are exceeded. The modeling results indicate the major contributors to these predicted exceedances are PPL Colstrip Units #3 and #4. During any predicted exceedance shown by the model, the Project is not a significant contributor (i.e., Project impacts are below the PSD Class I significance level). Table B-3 and Table B-4 show the Project's highest impacts at the receptors where the 3-hr and 24-hr SO₂ Class I increments, respectively, are exceeded.

Table B-3 Project Contributions to Predicted SO₂ 3-hr Class I Increment Exceedances on the Northern Cheyenne Reservation

Receptor Number	Receptor Location		Date of Impact		Cumulative Impact (µg/m³)	Project Impact at Receptor		
	Lambert Conf. E. (km.)	Lambert Conf. N. (km.)				Date and Time of Impact		1st / 2nd High Impact (µg/m³)
			Day	Start Hour		Day	Start Hour	
271	224.807	24.444	46	1200	38.18	275	0600	0.95
						302	1200	0.89
272	226.732	24.501	63	1200	36.80	336	1200	0.97
						275	0600	0.96
269	220.957	24.331	260	1200	36.31	275	0600	0.99
			178	1200	35.61	115	0600	0.93
			63	1200	32.24			
268	219.032	24.274	260	1200	35.37	275	0600	1.01
			178	1200	33.56	115	0600	0.96
			63	1200	25.91			
270	222.882	24.388	178	1200	31.59	275	0600	0.97
			46	1200	30.89	302	1200	0.91
273	228.657	24.558	63	1200	30.38	336	1200	1.06
						275	0600	0.98
267	217.152	24.176	178	1200	26.26	275	0600	0.96
			63	1500	25.71	302	1200	0.94
266	216.157	23.222	63	1500	25.51	302	1200	0.94

Source: Memo to Dan Walsh, DEQ from Diane Lorenzen, P.E., 2002b

Table B-4 Project Contributions to Predicted SO₂ 24-hr Class I Increment Exceedances on the Northern Cheyenne Reservation

Receptor Number	Receptor Location		Date of Impact		Cumulative Impact (µg/m³)	Project Impact at Receptor		
	Lambert Conf. E. (km.)	Lambert Conf. N. (km.)				Date of Impact		Project High Impact (µg/m³)
			Day	Start Hours		Day	Start Hours	
268	219.032	24.274	363	00 - 23	6.64	363	00 - 23	0.05
			189	00 - 23	5.34	189	00 - 23	0.03

Source: Memo to Dan Walsh, DEQ from Diane Lorenzen, P.E., 2002b

Cumulative impacts at the NCR, with respect to the 24-hr and 3-hr SO₂ PSD increments, are considered high, but the Project's contributions to the exceedances are below the PSD Class I significance levels. Therefore, the Project's contributions to the exceedances on the NCR are considered low during the times of exceedances. The annual modeled SO₂ impacts at the NCR are above the PSD Class I significance level but below the increment. Therefore, the predicted cumulative impacts with respect to the Class I increment are considered moderate.

Cumulative Visibility Analysis

As part of assessing air quality impacts of the Project in combination with impacts of other major sources in the region, a cumulative visibility analysis was completed. The focus of the cumulative visibility analysis was on impacts to PSD Class I areas in the Project vicinity (i.e., YNP, UL Bend, NAW, and NCR).

The Federal Land Managers Air Quality Related Values Workshop (FLAG) Guidance document (December 2000) indicates that a cumulative visibility analysis is expected when an individual source shows impacts that exceed a 5% change in light extinction. The Project exceeded this criteria in three PSD Class I areas (YNP, NAW and UL Bend), so a cumulative impacts analysis is expected. The NCR is not a mandatory PSD Class I area (not designated by the Federal Clean Air Act), so a visibility analysis is not required by regulation; however, results of visibility modeling on the NCR are provided in this Appendix.

Procedures for conducting a cumulative visibility analysis are described in Section D.2 of the FLAG Guidance document (U.S. Forest Service, et. al., 2000). In this case, several alternate approaches to determining cumulative visibility impacts from distant sources have been applied as follows:

- Scenario #1: The proponent used a visibility baseline at year 1996 and modeled emissions from PSD sources proposed, built or with emissions since that date. Between 1987 and 1997, the US Forest Service and National Park Service started collecting aerosol and relative humidity background data at various PSD Class I areas located in the western U.S. as part of the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring program. Natural visibility extinction coefficients listed in the FLAG document for western U.S. Class I areas are reasonably representative of baseline conditions existing during the first ten years of the IMPROVE monitoring program. Therefore, 1996 was assumed to be the visibility baseline date for determining which background sources should be included in the cumulative Class I visibility analysis (memo to Dan Walsh, DEQ from Diane Lorenzen, P.E., 2002). Emissions from major sources or major modifications that were permitted since 1996 were included in the CALPUFF modeling.
- Scenario #2: The Federal Land Managers (FLM) have asserted that a cumulative analysis must consider all major source and major modification emissions increases permitted after the PSD baseline date of January 6, 1975. Emissions increases (but not decreases) from the PSD sources permitted since 1975 were included in the CALPUFF modeling conducted by the FLMs.
- Scenario #3: In response to the FLM position on baseline, the proponent has completed additional CALPUFF modeling to predict cumulative visibility impacts from all

major sources and major modifications, including both emissions increases and decreases, since the PSD baseline date of January 6, 1975. This analysis predicts the aggregate visibility impacts of source emissions changes by combining both positive and negative predictions of visibility impact (change in light extinction or % delta b_{ext}) into a cumulative result.

The following sections discuss the results of cumulative visibility modeling with each scenario.

Scenario #1: Cumulative Visibility Modeling Results

Emissions sources included in Scenario #1 are listed in Table B-1; however, Graymont, Colstrip Energy Limited Partnership, and Colstrip Units 3 & 4 were permitted before the 1996 baseline date and are not included in the cumulative analysis. Results generated by application of Scenario #1, incorporating emissions since 1996, are given in Table B-5. The table summarizes the daily results of the cumulative visibility impact analysis on the Class I areas and it provides the Project's contribution during that day.

Table B-5 The Project and Cumulative Visibility Modeling Results with 1996 Baseline

Date	Receptor Number	Cumulative Change in Light Extinction (%)	Receptor Number	Change in Light Extinction from the Project (%)
Yellowstone National Park				
March 6	1	14.67	234	13.03
July 21	214	12.07	214	9.63
January 16	33	10.07	33	8.22
September 29	178	9.27	183	7.14
March 24	214	8.91	214	5.81
July 20	39	6.92	34	5.59
January 17	33	6.85	33	5.66
April 6	214	6.13	214	6.03
October 7	33	6.13	33	5.31
September 19	33	6.07	--	<5.0
June 16	33	5.90	--	<5.0
February 14	113	5.73	--	<5.0
September 20	156	5.69	--	<5.0

Date	Receptor Number	Cumulative Change in Light Extinction (%)	Receptor Number	Change in Light Extinction from the Project (%)
May 13	33	5.20	--	<5.0
May 12	57	5.06	--	<5.0

UL Bend Wilderness

February 17*	243	9.95	243	7.93
February 18	243	9.75	243	6.83
August 27	243	8.30	243	6.39
February 16	243	6.62	243	6.49
December 11	243	5.62	243	<5.0

North Absaroka Wilderness

January 16	349	13.65	349	11.07
March 6	349	10.62	349	7.29
January 17	349	9.52	349	7.68
June 16	349	7.90	--	<5.0
July 20	350	7.36	350	6.15
October 7	349	6.78	349	5.49
September 19	349	6.60	350	<5.0
September 29	350	5.95	--	5.30
May 13	349	5.29	--	<5.0
March 23	349	5.27	--	<5.0
May 12	350	5.26	--	<5.0
August 12	349	5.25	--	<5.0

Source: Memo to Dan Walsh, DEQ from Diane Lorenzen, P.E., 2002b

Note: Relative Humidity (RH) Factor Estimation Method: Hourly CALMET Database RH Data (Maximum RH of 98% for Particle Growth)

The maximum impacts predicted by the cumulative visibility analysis in Scenario #1 are higher than 10% at YNP and NAW. Therefore, the predicted impacts would be considered high.

Cumulative impacts predicted at the UL Bend are below 10% but above the *de minimis* level. Therefore, the predicted impacts would be considered moderate.

Scenario #2: Cumulative Visibility Modeling Results

Impacts determined in the Scenario #2 cumulative visibility modeling conducted by the FLMs are given in Table B-6. The FLM modeling included the facilities listed in Table B-1 (7 other PSD sources and the Project) in a CALPUFF modeling analysis, resulting in the visibility impacts given in Table B-6.

Table B-6 The Project and Cumulative Visibility Impacts from the FLM Modeling Analysis

The Project Visibility Impacts (without other PSD sources)			
Class I Area	Change in Light Extinction (Days > 5%)	Change in Light Extinction (Days > 10%)	Maximum Change in Light Extinction (%)
Yellowstone NP	9	1	12.74 %
UL Bend WA	4	0	8.14 %
North Absaroka WA	5	1	10.47 %
Northern Cheyenne	35	12	38.35%
Visibility Impacts of the Project (with 7 other PSD Sources)			
Class I Area	Change in Light Extinction (Days > 5%)	Change in Light Extinction (Days > 10%)	Maximum Change in Light Extinction (%)
Yellowstone NP	39	24	119.93 %
UL Bend WA	46	28	156.05 %
North Absaroka WA	33	21	126.41 %
Northern Cheyenne	260	224	637.07%

Source: National Park Service and US Fish Wildlife Service, 2002b

Note: CALPUFF modeling with 1990 meteorological data and maximum RH of 98%

Scenario #2 modeling predicted days above 10% extinction with Project emissions alone at YNP and NAW, and numerous days above 10% in the cumulative analysis. This scenario may result in a finding of adverse impact by the FLMs and the resulting impacts to all Class I areas would be rated high.

Scenario #3: Cumulative Visibility Modeling

The proponent provided additional cumulative visibility modeling to address the FLM position that the baseline should be concurrent with the initiation of the PSD program. This modeling used the PSD sources listed in Table B-1, but also included reductions in sulfur dioxide emissions from major sources in the region over the time period of 1975 to present. Table B-7 provides the sources and emissions used in Scenario #3 modeling.

Table B-7 PSD Source SO₂ Emissions Changes Based on 1975 Baseline

Source	1977 ^e Actual Emissions (tpy)	2001 Actual Emissions (tpy)	24-hour Max.		
			Baseline (lb/day)	Current ^f (lb/day)	Change (lb/day)
ExxonMobil Refinery, Billings ^a	9,800	5,112	101,402	53,154	-48,248
YELP, Billings	0	1,932	0	16,320	16,320
Conoco Refinery, Billings ^a	3,198	1,102	71,647	16,901	-54,746
MSCC, Billings ^a	2,000	1,969	198,400	74,336	-124,064
PPL-Corette, Billings ^a	9,986	2,647	78,200	33,296	-44,904
Western Sugar, Billings ^b	815	86	33,070	7,558	-25,512
Cenex Refinery, Laurel ^a	11,830	2,558	76,618	64,957	-11,661
Colstrip 3&4	NA	1,243	0	65,424	65,424
Rocky Mountain Generation	NA	NA	0	4,694	4,694
Anaconda Smelter, Anaconda ^c	321,136	0	1,759,649	0	-1,759,649
Asarco, East Helena ^d	80,000	0	188,420	0	-188,420
Graymont Lime, Townsend	NA	92	0	3,048	3,048
Total	438,765	16,741	2,507,406	336,640	

Source: Bull Mountain Development Company, No. 1, LLC, 2002d

a Baseline 24-hour emissions for Exxon, Conoco, MSCC, PPL and Cenex based on 1989 Pechan Report to EPA, Maximum Feasible Emissions.

b Baseline 24-hour emissions for Western Sugar based on 1989 Pechan Report to EPA, Potential to Emit.

c Baseline 24-hour emissions for Anaconda based on 1977 annual emissions divided by 365 days per year.

d Baseline 24-hour emissions for Asarco based on Operating Permit for facility, representing SIP restrictions.

e 1977 Emission are consistent with 1975 emissions

f Current 24-hour emission for existing and proposed sources based on permit allowables

Scenario #3 CALPUFF visibility modeling was completed by modeling all of the sulfur dioxide emissions increases since the baseline and then modeling all of the emissions decreases since the baseline. The shut-down of the Anaconda Smelter and the ASARCO Lead Smelter in East Helena, along with reductions in sources of sulfur dioxide in the Billings-Laurel area since adoption of a new State Implementation Plan (SIP) have produced large reductions of sulfur dioxide in the region. By modeling both increases and decreases and aggregating results in post-processing of the model data, a more complete picture of emissions changes and resulting visibility impairment is presented. Tables B-8, B-9, and B-10 provide the results of cumulative visibility monitoring under this Scenario for YNP, UL Bend and NAW.

Table B-8 Scenario #3: Yellowstone National Park Cumulative Visibility Modeling

Date	Receptor Number	RHDS^a b_{ext}[%] (%)	RHIS^b b_{ext}[%] (%)	Cumulative b_{ext}[%] (%)	Receptor Number	Project b_{ext}[%] (%)
March 5	33	120.03	-104.29	15.74	234	12.86
September 19	170	45.01	-292.09	-247.08	--	<5%
May 12	33	43.02	-237.42	-194.40	--	<5%
September 28	61	40.07	-43.23	-3.16	183	7.14
February 14	58	38.46	-129.39	-90.93	--	<5%
May 11	57	35.03	-102.07	-67.04	--	<5%
February 13	59	33.09	-73.92	-40.83	--	<5%
June 15	33	32.35	-52.01	-19.66	--	<5%
July 20	246	30.12	-173.20	-143.08	214	9.63
August 3	58	26.76	-14.99	11.77	--	<5%
July 21	58	26.14	-10.62	15.52	--	<5%
August 11	33	24.56	-127.11	-102.55	--	<5%
January 15	33	22.73	-350.89	-328.16	33	8.22
June 16	33	21.23	-46.76	-25.53	--	<5%
January 16	33	20.61	-639.65	-619.04	33	5.66
September 20	157	20.43	-221.89	-201.46	--	<5%
September 18	33	20.01	-111.73	-91.72	--	<5%
July 22	58	19.68	-49.60	-29.92	--	<5%
December 21	113	14.97	-1.83	13.14	--	<5%
August 10	33	13.30	-78.07	-64.77	--	<5%
March 6	113	12.44	-6.99	5.45	--	<5%
March 23	214	12.38	-65.63	-53.25	214	5.81
July 10	33	12.06	-164.32	-152.26	--	<5%
August 4	33	11.20	-96.43	-85.23	--	<5%
July 19	40	10.04	-244.98	-234.94	34	5.59

Source Bull Mountain Development Company, No. 1, LLC., 2002d

^aRegional Haze Deteriorating Sources (RHDS); emissions from sources commencing after guideline baseline date of January 6, 1975

^bRegional Haze Improving Sources (RHIS); emissions from sources shutting down after guideline baseline date of January 6, 1975

Note: Relative Humidity (RH) Factor Estimation Method: Hourly CALMET Database RH Data (Maximum RH of 98% for Particle Growth)

Table B-9 Scenario #3: UL Bend Wilderness Area Cumulative Visibility Modeling

Date	Receptor Number	RHDS (1) b _{ext} [%] (%)	RHIS (2) b _{ext} [%] (%)	Cumulative b _{ext} [%] (%)	Receptor Number	Project b _{ext} [%] (%)
February 16	243	143.49	-139.45	4.04	243	8.01
November 25	243	131.58	-13.92	117.66	--	<5%
March 7	243	87.62	-8.22	79.40	--	<5%
February 17	243	83.35	-132.55	-49.20	243	6.88
August 26	243	57.02	-277.34	-220.32	243	8.53
September 2	243	28.01	-41.82	-13.81	--	<5%
May 12	243	25.92	-5.47	20.45	--	<5%
May 14	243	25.53	-14.83	10.70	--	<5%
February 1	243	24.29	-123.00	-98.71	--	<5%
September 16	243	22.78	-11.95	10.83	--	<5%
February 15	243	22.75	-55.82	-33.07	243	6.49
May 15	243	20.98	-30.04	-9.06	--	<5%
September 5	243	20.95	-44.36	-23.41	--	<5%
June 16	243	20.35	-12.43	7.92	--	<5%
September 19	243	17.52	-15.10	2.42	--	<5%
September 29	243	17.24	-14.00	3.24	--	<5%
August 27	243	14.00	-477.44	-463.44	--	<5%
May 27	243	13.93	-38.77	-24.84	--	<5%
May 23	243	12.90	-13.16	-0.26	--	<5%
July 31	243	11.73	-74.30	-62.57	--	<5%
July 23	243	11.64	-29.03	-17.39	--	<5%
December 10	243	11.22	-56.13	-44.91	--	<5%
July 25	243	10.55	-13.64	-3.09	--	<5%

Source: Bull Mountain Development Company, No. 1, LLC., 2002d

Table B-10 Scenario #3: North Absaroka Wilderness Area Cumulative Visibility Modeling

Date	Receptor Number	RHDSa b _{ext} [%] (%)	RHISb b _{ext} [%] (%)	Cumulative b _{ext} [%] (%)	Receptor Number	Project b _{ext} [%] (%)
March 5	349	124.89	-106.38	18.51	349	7.25
May 12	349	46.41	-237.96	-191.55	--	<5%

Date	Receptor Number	RHDSa bext% (%)	RHISb bext% (%)	Cumulative bext% (%)	Receptor Number	Project bext% (%)
June 15	349	43.03	-73.52	-30.49	--	<5%
February 14	350	40.43	-127.60	-87.17	--	<5%
January 15	349	32.36	-360.22	-327.86	349	11.07
May 11	350	32.03	-88.39	-56.36	--	<5%
September 28	350	30.34	-19.38	10.96	350	5.30
January 16	349	28.97	-663.84	-634.87	349	7.68
February 13	350	28.85	-57.37	-28.52	--	<5%
June 16	349	28.27	-66.18	-37.91	--	<5%
August 11	350	27.56	-133.87	-106.31	--	<5%
July 20	350	25.81	-73.18	-47.37	--	<5%
September 19	349	23.20	-136.56	-113.36	--	<5%
September 18	349	21.74	-112.57	-90.83	--	<5%
August 5	350	21.20	-7.33	13.87	--	<5%
July 22	350	16.54	-40.76	-24.22	--	<5%
July 21	350	16.23	-12.97	3.26	--	<5%
August 10	349	15.13	-88.78	-73.65	--	<5%
July 10	349	13.75	-162.97	-149.22	--	<5%
August 4	349	11.87	-99.45	-87.58	--	<5%
July 19	350	10.42	-228.03	-217.61	350	6.15

Source: Bull Mountain Development Company, No. 1, LLC, 2002^d

^aRegional Haze Deteriorating Sources (RHDS); emissions from sources commencing after guideline baseline date of January 6, 1975

^bRegional Haze Improving Sources (RHIS); emissions from sources shutting down after guideline baseline date of January 6, 1975

Note: Relative Humidity (RH) Factor Estimation Method: Hourly CALMET Database RH Data (Maximum RH of 98% for Particle Growth)

Results of cumulative visibility modeling in Scenario #3 show improvement over the more conservative results from Scenario #2. However, Tables B-8 and B-10 still show impacts exceeding the 10% light extinction level, for both cumulative analyses and the Project alone. These results indicate a potential for an impact to visibility in Class I areas that rates high. Table B-9 shows impacts at UL Bend that exceed 10% in the cumulative mode, but no exceedances of the 10% criteria by the Project alone. Impacts due to the Project at UL Bend would be considered moderate.

Since the cumulative model-predicted impacts remain above 10% at YNP and NAW in all three scenarios and the Project impacts are above the visibility *de minimis* level (0.4%), the FLM and MDEQ will need to make a decision as to whether or not the Project adversely affects the Class I areas.

The proponent has further analyzed the modeled visibility results on a case-by-case basis for the highest impact days and has asserted in a letter to MDEQ that, on the days the model-predicted impacts exceed the 10% threshold, the Project does not adversely impact visibility in any of the Class I areas. (Bull Mountain Development Company No 1 LLC, ²⁰⁰²c). In this letter, the proponent explains that during the high impact days, CALPOST, when predicting a change in light extinction, is highly sensitive to relative humidity. The model-predicted change in light extinction is calculated relative to natural background conditions. The proponent claims that on most model-predicted high impact days, weather conditions (e.g., snow, fog, rain, etc.) are causing changes in light extinction greater than any model-predicted visibility impact from the Project. Therefore, the proponent claims that the Project's visibility impacts on days of high relative humidity are insignificant compared to visibility impairment caused by natural conditions (snow, fog, rain, etc.). When the high relative humidity days are excluded, the predicted visibility impacts to the Class I areas are all below the 5% change in light extinction threshold. If the proponent's assertions about the CALPUFF model are accepted by DEQ and/or the FLMs, no cumulative visibility analysis would be expected at any of the Class I areas